U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION REPORT

I. HEADING

Date: June 26, 1998

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Removal Action Branch

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Subject: Pyridium Mercury Disposal Site No. 1 (Pyridium 1)
Village of Harriman, Orange County, New York

POLREP NO. Eight (8)

II. BACKGROUND

Site No.: EV
Response Authority: CERCLA
NPL Status: Non-NPL
State Notification: NYSDOH notified
Action Memo Status: Signed 09/29/95, 9/25/97 and 3/6/98
Start Date: 1/9/95, 9/30/97, and 3/18/98
Demobilization Date: 4/5/95, on-going
Completion Date: 4/7/95, on-going

III. SITE INFORMATION

A. Incident Category: Illegal dump

121279

B. Site Description

1. Site location

The Pyridium Mercury Disposal Site No. 1 (Pyridium 1)was a trailer park located at the intersection of State Route 17M and Harriman Heights Road in the Village of Harriman, Orange County, New York. Five mobile home trailers were located at the trailer park. All the trailers were occupied as residential dwellings.

A white clay-like material discovered at the trailer park, was used to fill low-lying areas of a wetland. This material was reportedly a waste product from the production of niacinamide by the Pyridium Corporation during the 1940's and 1950's. Nepera Inc. of Harriman, New York, currently occupies and operates the facility previously operated by the Pyridium Corporation.

B. Preliminary Assessment/Site Inspection Results

On October 20, 1994, the United States Environmental Protection Agency (EPA) collected a composite waste sample for waste characterization and mercury speciation. The sample was analyzed for Target Compound List (TCL) parameters, Target Analyte List (TAL) parameters and toxicity by the Toxicity Characteristic Leachate Procedure (TCLP).

Although the TCLP results are below regulatory limits, the TAL analytical results indicate the presence of mercury at an estimated concentration of 130 milligrams per kilogram (mg/kg). All the other compounds detected were below the New York State Department of Environmental Conservation (NYSDEC) recommended soil cleanup objectives.

Mercury speciation analytical results indicated that the sample contained no significant quantities of elemental mercury, mono-methyl mercury, or dimethyl mercury. When the sample was dissolved in an acid leach test, the mercury +2 ion leachate concentration was essentially the same as the total mercury concentration. Based on these results, the laboratory concluded that the sample was a chemical substrate contaminated with a mercuric or mercurous salt.

On November 17, 1994, the EPA Environmental Response Team (ERT) and the Response Engineering and Analytical Contractor (REAC) collected dust samples in each of the mobile homes at the trailer park. The analytical results of the dust sampling

indicated mercury concentrations ranging from 0.84 mg/kg to 26.8 mg/kg.

On November 28, 1994, Nepera, Inc. of Harriman, New York signed an Administrative Order on Consent (AOC) with EPA agreeing to fund relocation of the residents of the trailer park. Nepera has distributed relocation settlements to eligible residents. The amount of the settlement was based on federal relocation guidelines.

On January 9, 1995, verbal authorization was given by the EPA Director of the Emergency and Remedial Response Division to decontaminate, remove and dispose of the mobile homes, storage sheds and decks from the trailer park; disconnect water, sewer and electric utilities; remove heating oil and propane storage tanks; and fence the property and post warning signs. An Action Memorandum confirming verbal authorization was approved on February 27,1996. For specific details refer to Polreps 1-3.

IV. RESPONSE INFORMATION

A. Situation

1. Current situation

ERRS continues excavating, stockpiling and loading out mercury contaminated soils. ERRS began loading out water which is infiltrating the excavation.

2. Removal actions to date

On June 12, water from the rain for rent tank was pumped through a .5 micron cartridge filter, sampled and sent for total mercury analysis. Water was also filtered through a resin media provided by Hudson Valley Water Treatment Co. and sent for total mercury analysis. Results revealed a concentration of 5 parts per billion (ppb) for both samples. Upon questioning the lab, it was revealed that the lab filtered both samples through a .45 micron filter prior to analysis. The lab also reported the results incorrectly as 5 ppb instead of .5 ppb. The lab was requested to rerun the samples (without filtering them) and the results were .8 and 10 ppb mercury, respectively. Continued use of this lab in the future is being evaluated.

On Monday, June 15, a second 21,000 rain for rent tank was delivered to hold the rain, surface water and perched water

infiltrating the excavation. A total of 40,000 gallons were pumped into the 2 storage tanks on site. While water treatment options were being investigated, a waste profile was submitted to the low bid wastewater treatment facility for off-site disposal. After being awarded the bid, the low bidder noticed the analysis of the water had a trace of bis (2-ethylhexyl)phthalate which is not allowed under their state permit. (The phthalate compound was also in the lab blank.) On June 17, a representative from Clean Harbors collected a sample of the water for bis (2-ethylhexyl) phthalate analysis.

On June 17, the water was rebid to additional facilities so in the event that Clean Harbors could not accept the water we would have a better price. (In the initial bid, the next low bid was 183% greater than Clean Harbors.) Cycle Chem/Clean Venture was the low bid on the second bid proposal for water disposal. They were set up as a contingency in case Clean Harbors could not accept the water or if they could not provide the trucks to move the volume of water in the time frame required. On June 22, a tanker truck of water was shipped to Clean Harbors of CT for waste water treatment.

On June 18, START collected 11 soil/waste samples and one water sample for enforcement purposes. All samples will be analyzed for target compound list/target analyte list (TCL/TAL) and cyanide by Compuchem Laboratories, Cary, NC. Four split samples (included in the above total) were collected of the waste and delivered to the USEPA Department of Environmental Science and Assessment for metal analysis. Verbal results are due in 2 weeks.

On June 22, ERRS continued backfilling the southern perimeter of the site where post excavation samples confirmed that the area met the cleanup objective of 25 parts per million (ppm) mercury. The analytical results for two post excavation samples collected on June 19 revealed the presence of mercury above the clean-up criteria. The area will be excavated an additional 6"-1' and resampled to confirm the cleanup level is attained.

On June 23, another water sample was collected from the pond and sent to RECRA Labnet (a different lab than previously utilized) to filter to .45 micron and analyze for mercury. The result was .00042 mg/l mercury. This was above the allowable mercury concentration for a surface water discharge permit. Since the filtered water exceeds the surface water discharge limits for mercury, and water disposal is imminent, the water will be sent for off-site disposal.

On Wednesday, June 24, ERRS initiated excavating and backfilling contaminated soils along the shoulder of State Route 17M. The length of the excavation was approximately 100' by 10' wide with an average depth of 4.5-5.5'. Due to the close proximity of the roadway to the area of excavation, a 10' standoff between the excavation and the road was maintained so the roadway would not be impacted (undermined). The majority of visual contamination was removed from the area parallel to Route 17M. While excavating by the sewer line previously connected to the trailer park, the capped line was damaged. The main sewer line running parallel to 17M was not affected, so the extension was cut and recapped a little closer to the main sewer line. Waste remained around the old connection from the sewer line to the trailer park. A sample of the waste was collected which revealed 441 ppm mercury remains at the previous sewer line connection. Additionally, visible contamination exists in the perimeter of the excavation wall along Rt. 17M. This material was left in place due to the close proximity of the roadway and limited threat of exposure, as it is beneath approximately 2' of crushed gravel and stones.

On Thursday, June 25, 7 tank trucks were loaded with water from the frac tanks and pooled water from the excavation for off-site disposal at Clean Venture located in Camden, NJ and Clean Harbors of CT.

START continues to conduct daily air monitoring with minirams, an HNU, Jerome meter and hydrogen sulfide meter. Levels are below the action limits on all instruments.

As of Friday, June 26, a total of 4,437 tons of mercury contaminated soils were loaded for off-site disposal at G.R.O.W.S. landfill in Morrisville, Pennsylvania. To date, approximately 44,000 gallons of non haz, non DOT water contaminated with mercury have been sent for off-site treatment and disposal to Clean Venture located in Camden, NJ and Clean Harbors of Connecticut located in Bristol, CT.

3. Enforcement

The Office of Regional Council is reviewing available site documentation to identify PRPs and will evaluate the viability of legal claims stated by Nepera.

B. **Next Steps**

A. Excavation and transportation and disposal of contaminated soil will continue.

B. Backfilling operations will continue in the areas where post excavation sampling verified the clean up objective has been met.

C. Collection and off-site disposal of water encountered in the excavation.

D. Collection of post excavation samples.

C. **Key Issues**

The concerned citizen (whom I have explained site activities and hazards of the material on numerous occasions) has contacted the local building inspector and NYSDOH reporting concerns about site activities. They have been at the site and are kept abreast of site activities and informed the resident that they do not see any actions at the site which present any problems. I contacted the resident again on June 16 reaffirming my availability and interest of any concerns that he may have relating to the site. The resident claimed to contact a local congressmen, so on June 16, I contacted Peter Brandt (USEPA Communications Division) to alert him of the situation. On June 17, a Amano key clock was brought to the site to document the tours conducted by security during off-site hours.

Water infiltrating the excavation continues to be a problem in addition to the poor response from Waste Management of PA in providing trucks for off-site disposal of the waste to G.R.O.W.S Landfill.

V. COST INFORMATION

The following are estimated costs for the removal action as of June 26, 1998:

	PROJECT CEILING	PREVIOUS COSTS	COSTS TO DATE	FUNDS REMAINING
ERRS (ERCS) Costs	$1,028,400	$102,000	$369,200	$557,200
START (TAT) Costs	$ 81,400	$19,700	$14,700	$ 47,000
Contingency	$ 209,500			$209,500
EPA Cost	$107,000	$24,200	$ 40,175	$42,625
TOTAL PROJECT CEILING	$1,426,300	$145,900	$424,075	$856,325

The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure, which the EPA may include in any claims for cost recovery.

VI. DISPOSITION OF WASTE

Wastestream	Medium	Quantity	Containment-Migration Control	Treatment	Disposal
Non-hazardous soil, wood, PPE and debris	solid	4,437 tons	dump trailers/ triaxle dump trucks	landfill	G.R.O.W.S. Landfill, Morrisville, PA
Non-hazardous, non-DOT water contaminated with mercury	water	27,650 gallons	tanker truck	waste water treatment	Cycle Chem/Clean Venture Inc. Camden, NJ

Wastestream	Medium	Quantity	Containment-Migration Control	Treatment	Disposal
Non-hazardous, non-DOT water contaminated with mercury	water	16,350 gallons	tanker truck	waste water treatment	Clean Harbors of Connecticut, Bristol, CT